



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,015	12/07/2004	Takahiro Miyagi	275868US6PCT	8751
22850	7590	10/04/2005		EXAMINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				FANG, JERRY C
			ART UNIT	PAPER NUMBER
				2873

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/517,015	MIYAGI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jerry Fang	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12/7/2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      - Certified copies of the priority documents have been received in Application No. \_\_\_\_.
      - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/7/2004</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5 - 7, 11 - 13, and 17 - 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Masatoshi (JP 2000-11406).

Regarding claims 1, 7, and 13, Masatoshi discloses an objective lens (Fig12, 55); a lens-supporting member (Fig.12, 51) for holding said objective lens; a plurality of linear elastic supporting members (Fig.12, 53) each for supporting said lens-supporting member on an end side thereof; a fixing member (Fig.12, 52) for supporting the other end side of each of said elastic supporting members; and a drive means (Para. 0005 and Fig.12, 54) for driving said lens-supporting member in a tracking direction and a focus direction, wherein each of said elastic supporting members is fixed on said lens-supporting member and said fixing member by bonding means (Fig.12, 56), and wherein an uneven face having a surface roughness (Para. 0038 and Fig.12, 51a) allowing said bonding means to invade therein and harden is formed on at least the surface of said one end side and the surface of the other end side of each of said elastic supporting members.

Regarding claims 5, 11, and 17, Masatoshi discloses uneven face has a surface roughness of at least 0.09  $\mu\text{m}$  (Para. 0034).

Claims 6, 12, and 18 are rejected because as the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 2 - 4, 8 - 10, and 14 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masatoshi (JP 2000-11406) in view of Keiji (JP 2004-307951).

Regarding claims 2, 8, and 14, Masatoshi discloses an uneven face which is rough. Masatoshi fails to disclose the rough face is composed of plating layer. Keiji discloses a rough face composed of plating layer (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use

Art Unit: 2873

plating layer to compose a rough face as taught by Keiji, with the uneven face of Masatoshi, since as shown by Keiji, plating layer is commonly used in order to compose a rough face.

Regarding claims 3, 9, and 15, Masatoshi fails to disclose the uneven face is composed of plating layer on which a number of pin holes are formed. Keiji discloses an uneven face is composed of plating layer on which a number of pin holes are formed (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the create an uneven face with plating layer on which a number of pin holes are form as taught by Keiji, with the uneven face of Masatoshi, since as shown by Keiji, using a plating layer on which a number of pin holes are formed is commonly used in order to create an uneven face.

Regarding claims 4, 10, and 16, Masatoshi discloses an uneven face of said elastic supporting member. Masatoshi fails to disclose the method of making the rough face. Keiji discloses a method of making a rough face by etching (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use etching to create an uneven face as taught by Keiji, with the elastic supporting member of Masatoshi, since as shown by Keiji, etching is commonly used in order to create an uneven face.

### ***Conclusion***

Art Unit: 2873

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Fang whose telephone number is 5712726013. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 5712722328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J.F.



TIMOTHY THOMPSON  
PRIMARY EXAMINER